

INTERNATIONAL SEARCH REPORT

International Application No

PCT/DE2004/000546

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C02F1/20 C02F9/00 B09B3/00 C02F3/28
//C02F103/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C02F B09B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 168 642 B1 (VLYSSIDES APOSTOLOS G ET AL) 2 January 2001 (2001-01-02)	1-3,19
Y	column 1, line 65 - column 2, line 11; figure 4 column 3, line 8 - line 67 column 5, lines 35-54	13
Y	EP 0 775 514 A (EBARA CORP) 28 May 1997 (1997-05-28) page 3, line 40 - page 4, line 1; figure 1 page 4, line 58 - page 5, line 2	1-3,5,6, 8,10
Y	DE 100 05 149 A (FRIEDLI DANIEL) 23 August 2001 (2001-08-23) the whole document	1-3,5,6, 8,10
	----- -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

28 September 2004

Date of mailing of the international search report

14.10.04

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Borello, E

INTERNATIONAL SEARCH REPORT

International Application No

PCT/DE2004/000546

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 43 24 410 C (ENVIRO CONSULT INGENIEURGESELL) 4 August 1994 (1994-08-04) column 2, lines 52-60 column 3, lines 9-31; figure 1 -----	1,5,7,8
A	DE 195 08 785 A (MANNESMANN AG) 28 September 1995 (1995-09-28) column 4, lines 15-19; figure 1 -----	1
X	US 5 228 995 A (STOVER ENOS L) 20 July 1993 (1993-07-20) claim 1; figures 1,2 column 2, lines 54-56 column 10, lines 61-63 -----	21
Y		13
X	DE 196 10 056 A (LINDE AG) 18 September 1997 (1997-09-18) claims 1,2,4,9; figure 1 column 3, line 42 - column 4, line 6 column 4, lines 20-23,33-55 -----	21,22
X	DE 197 25 823 A (LINDE KCA DRESDEN GMBH) 24 December 1998 (1998-12-24) figure 1 -----	22
A	DE 196 48 731 A (HERHOF UMWELTTECHNIK GMBH) 28 May 1998 (1998-05-28) figure 1 column 2, lines 5-11,49-53 -----	1,13,16

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/DE2004/000546

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6168642	B1	02-01-2001	GR 1002461 B AU 1069397 A DE 69608818 D1 DE 69608818 T2 EA 845 B1 EP 0876220 A1 WO 9724186 A1	01-11-1996 28-07-1997 13-07-2000 11-01-2001 26-06-2000 11-11-1998 10-07-1997
EP 0775514	A	28-05-1997	JP 3103027 B2 JP 9150031 A CN 1155521 A ,B DE 69622509 D1 DE 69622509 T2 EP 0775514 A1 US 5702572 A	23-10-2000 10-06-1997 30-07-1997 29-08-2002 08-05-2003 28-05-1997 30-12-1997
DE 10005149	A	23-08-2001	DE 10005149 A1 AU 3025301 A WO 0156715 A1	23-08-2001 14-08-2001 09-08-2001
DE 4324410	C	04-08-1994	DE 4324410 C1	04-08-1994
DE 19508785	A	28-09-1995	DE 19508785 A1 AT 405827 B AT 41295 A	28-09-1995 25-11-1999 15-04-1999
US 5228995	A	20-07-1993	NONE	
DE 19610056	A	18-09-1997	DE 19610056 A1	18-09-1997
DE 19725823	A	24-12-1998	DE 19725823 A1 AU 735284 B2 AU 8337498 A CN 1131316 B WO 9858070 A1 EP 0988392 A1	24-12-1998 05-07-2001 04-01-1999 17-12-2003 23-12-1998 29-03-2000
DE 19648731	A	28-05-1998	DE 19648731 A1	28-05-1998

INTERNATIONAL SEARCH REPORT

International application No.

PCT/DE2004/000546

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see supplemental sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/DE2004/000546

The International Searching Authority has determined that this international application contains multiple (groups of) inventions, namely

1. Claims 1-12, 17-20

method according to claim 1 wherein the physico-chemical treatment of process water comprises a stripper device for stripping ammonium.

2. Claims 1, 13-16, 18-22

method according to claim 1 wherein the treatment of process water comprises a biological stage in a hybrid reactor.
Hybrid reactors are claimed in independent claims 21 and 22.
